

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1. (currently amended) A method of manipulating the temperature of a patient comprising steps of:

positioning a balloon catheter in the stomach of the patient;

expanding the balloon catheter to a size and shape that distends the stomach; and

exchanging heat between the balloon catheter and the distended stomach so as to controllably alter the temperature of a substantial portion of the patient's body.

Claim 2. (Original) The method of claim 1, wherein the step of exchanging heat between the balloon catheter and the stomach further includes introducing a heat exchange fluid into the balloon catheter.

Claim 3. (Original) The method of claim 2, further comprising maintaining the heat exchange fluid at a temperature different from normothermia.

Claim 4. (Original) The method of claim 2, further comprising maintaining the heat exchange fluid at a temperature different from normothermia for a period of time sufficient to modify the core body temperature of the patient.

Claim 5. (Original) The method of claim 2, further comprising maintaining the heat exchange fluid at a temperature above normothermia.

Claim 6. (Original) The method of claim 2, further comprising maintaining the heat exchange fluid at a temperature below normothermia.

Claim 7. (Original) The method of claim 1, wherein the step of exchanging heat between the balloon catheter and the stomach further includes introducing a liquid into the balloon catheter.

Claim 8. (Original) The method of claim 1, wherein the step of exchanging heat between the balloon catheter and the stomach further includes introducing a gas into the balloon catheter.

Claim 9. (Original) The method of claim 1, further comprising: introducing the balloon catheter through the esophagus of the patient before positioning the balloon catheter in the stomach of the patient, wherein the balloon catheter includes a catheter shaft having a diameter significantly less than the diameter of the esophagus.

Claim 10. (Original) The method of claim 1, further comprising expanding the balloon catheter in the stomach, wherein the expanded balloon catheter generally conforms with the size and shape of the stomach.

Claim 11. (canceled).

Claim 12. (Original) The method of claim 1, further comprising: maintaining a predetermined target temperature for the patient that is different from normothermia.

Claim 13. (Original) The method of claim 12, further comprising: returning the patient to normothermia after the step of maintaining the predetermined target temperature for the patient.

Claim 14. (Original) The method of claim 1, further comprising: monitoring the patient with a temperature probe to obtain a monitored temperature;

controlling the step of exchanging heat between the balloon catheter automatically based on the monitored temperature of the patient.

Claim 15. (Original) The method of claim 1, further comprising: administering an anti-shivering mechanism to the patient during the step of exchanging heat between the balloon catheter and the stomach.

Claim 16. (Original) The method of claim 15, wherein the step of administering the anti-shivering mechanism includes administering a therapeutically effective amount of an anti-shivering agent to the patient.

Claim 17. (Original) The method of claim 15, wherein the step of administering the anti-shivering mechanism includes administering a therapeutically effective amount of an anti-shivering agent to the patient and applying warmth to the skin of the patient.

Claim 18. (currently amended) A method of manipulating the temperature of a patient comprising steps of:

positioning a balloon catheter in the stomach of the patient,
introducing a heat exchange fluid into the balloon catheter;
maintaining the heat exchange fluid at a temperature below zero degrees centigrade; and

allowing the heat exchange fluid to flow through the balloon catheter in a closed-loop, wherein heat is exchanged between the balloon catheter and the stomach so as to controllably alter the temperature of at least a portion of the patient.

Claim 19. (Original) The method of claim 18, wherein the heat exchange fluid flows continuously in the step of allowing the heat exchange fluid to flow through the balloon catheter in a closed-loop.

Claim 20. (Original) The method of claim 18, maintaining the heat exchange fluid at a temperature different from normothermia for a period of time sufficient to modify the core body temperature of the patient.

Claim 21. (Original) The method of claim 18, further comprising maintaining the heat exchange fluid at a temperature below normothermia.

Claim 22. (canceled).

Claim 23. (Original) The method of claim 18, wherein the heat exchange fluid is a liquid.

Claim 24. (Original) The method of claim 18, wherein the heat exchange fluid is a gas.

Claim 25. (Original) The method of claim 18, further comprising maintaining the heat exchange fluid at a temperature above normothermia.

Claim 26. (Original) The method of claim 18, further comprising: introducing the balloon catheter through the esophagus of the patient before positioning the balloon catheter in the stomach of the patient, wherein the balloon catheter includes a catheter shaft having a diameter significantly less than the diameter of the esophagus.

Claim 27. (Original) The method of claim 18, wherein the step of introducing the heat exchange fluid into the balloon catheter further includes expanding the balloon catheter to generally conform with the size and shape of the stomach.

Claim 28. (Original) The method of claim 18, wherein the step of introducing the heat exchange fluid into the balloon catheter further includes expanding the balloon catheter to distend the stomach.

Claim 29. (currently amended) The method of claim 18 19, wherein the balloon catheter is in contact with the stomach during the step of allowing the heat exchange fluid to flow continuously through the balloon catheter.

Claim 30. (Original) The method of claim 18, further comprising: maintaining a predetermined target temperature for the patient that is different from normothermia.

Claim 31. (Original) The method of claim 30, further comprising: returning the patient to normothermia after the step of maintaining the predetermined target temperature for the patient.

Claim 32. (Original) The method of claim 18, further comprising:
monitoring the patient with a temperature probe to obtain a monitored temperature;
controlling the step of exchanging heat between the balloon catheter automatically based on the monitored temperature of the patient.

Claim 33. (Original) The method of claim 18, further comprising: administering an anti-shivering mechanism to the patient during the step of exchanging heat between the balloon catheter and the stomach.

Claim 34. (Original) The method of claim 33, wherein the step of administering the anti-shivering mechanism includes administering a therapeutically effective amount of an anti-shivering agent to the patient.

Claim 35. (Original) The method of claim 33, wherein the step of administering the anti-shivering mechanism includes administering a therapeutically effective amount of an anti-shivering agent to the patient and applying warmth to the skin of the patient.

Claim 36. (currently amended) A method of manipulating the temperature of a patient comprising steps of:

introducing a balloon catheter through the esophagus of the patient, wherein the balloon catheter includes a catheter shaft having a distal end, a balloon located on the distal end of the catheter shaft, and the catheter shaft includes a first lumen in fluid communication with the balloon and a second lumen in fluid communication with the balloon;

positioning the balloon in the stomach of the patient,

expanding the balloon with a heat exchange fluid delivered through the first lumen into the balloon and out of the balloon through the second lumen, wherein heat is exchanged between the balloon and the stomach so as to controllably alter the temperature of at least a portion of the patient;

inserting a temperature probe into the vasculature of the patient;

monitoring the temperature probe; and

controlling the exchange of heat between the balloon and the stomach based on the monitored temperature.

Claim 37. (Original) The method of claim 36, wherein the heat exchange fluid flows continuously in a closed-loop through the first lumen into the balloon and out of the balloon through the second lumen in the step of expanding the balloon.

Claim 38. (Original) The method of claim 36, wherein the expanded balloon generally conforms with the stomach in the step of expanding the balloon.

Claim 39. (Original) The method of claim 36, wherein the expanded balloon distends the stomach in the step of expanding the balloon.

Claim 40. (Original) The method of claim 36, maintaining the heat exchange fluid at a temperature different from normothermia for a period of time sufficient to modify the core body temperature of the patient.

Claim 41. (Original) The method of claim 36, further comprising maintaining the heat exchange fluid at a temperature below normothermia.

Claim 42. (Original) The method of claim 36, further comprising maintaining the heat exchange fluid at a temperature below zero degrees centigrade.

Claim 43. (Original) The method of claim 36, wherein the heat exchange fluid is a liquid.

Claim 44. (Original) The method of claim 36, wherein the heat exchange fluid is a gas.

Claim 45. (Original) The method of claim 36, further comprising maintaining the heat exchange fluid at a temperature above normothermia.

Claim 46. (Original) The method of claim 36, further comprising: maintaining a predetermined target temperature for the patient that is different from normothermia.

Claim 47. (Original) The method of claim 46, further comprising: returning the patient to normothermia after the step of maintaining the predetermined target temperature for the patient.

Claim 48. (Original) The method of claim 36, further comprising: monitoring the patient with a temperature probe to obtain a monitored temperature;

controlling the step of exchanging heat between the balloon catheter automatically based on the monitored temperature of the patient.

Claim 49. (Original) The method of claim 36, further comprising: administering an anti-shivering mechanism to the patient during the step of exchanging heat between the balloon catheter and the stomach.

Claim 50. (Original) The method of claim 49, wherein the step of administering the anti-shivering mechanism includes administering a therapeutically effective amount of an anti-shivering agent to the patient.

Claim 51. (Original) The method of claim 49, wherein the step of administering the anti-shivering mechanism includes administering a therapeutically effective amount of an anti-shivering agent to the patient and applying warmth to the skin of the patient.

Claims 52-63 (canceled).

Claim 64. (currently amended) A method of manipulating the temperature of a patient comprising steps of:

introducing a balloon catheter through the esophagus of the patient, wherein the balloon catheter includes a catheter shaft having a distal end, a balloon located on the distal end of the catheter shaft, and the catheter shaft includes a first lumen in fluid communication with the balloon and a second lumen in fluid communication with the balloon;

positioning the balloon in the stomach of the patient;

expanding the balloon with a heat exchange fluid delivered through the first lumen into the balloon, wherein the heat exchange fluid can exit the balloon through the

second lumen, and heat is exchanged between the balloon and the stomach so as to controllably alter the temperature of at least a portion of the patient;

monitoring the temperature of the heat exchange fluid delivered to the balloon;

monitoring the patient with a temperature probe introduced into the vasculature of the patient to obtain a monitored core temperature;

controlling the exchange of heat between the balloon and the stomach automatically based on the monitored core temperature of the patient.

Claims 65 and 66 (canceled).

Claim 67. (previously presented) The method of claim 64, wherein the step of controlling the exchange of heat between the balloon and the stomach further includes the step of controlling the temperature of the heat exchange fluid delivered to the balloon.

Claim 68. (previously presented) The method of claim 64, wherein the step of controlling the exchange of heat between the balloon and the stomach further includes maintaining the heat exchange fluid at a temperature below normothermia.

Claim 69. (previously presented) The method of claim 64, wherein the step of controlling the exchange of heat between the balloon and the stomach further includes maintaining the heat exchange fluid at a temperature below zero degrees centigrade.

Claim 70. (previously presented) The method of claim 64, wherein the step of controlling the exchange of heat between the balloon and the stomach further includes controlling the speed at which the heat exchange fluid is delivered to the balloon.

Claim 71. (currently amended) The method of claim 64, further comprising: administering an anti-shivering mechanism to the patient during the step of controlling the exchange of heat between the balloon and the stomach.

Claim 72. (previously presented) The method of claim 71, wherein the step of administering the anti-shivering mechanism includes administering a therapeutically effective amount of an anti-shivering agent to the patient and applying warmth to the skin of the patient.

Claim 73. (previously presented) The method of claim 64, wherein the step of expanding the balloon catheter with the heat exchange fluid further includes distending the stomach with the balloon catheter.

Claim 74. (currently amended) The method of claim 64, wherein the step of controlling the exchange of heat between the balloon and the stomach automatically based on the monitored core temperature of the patient further includes controllably altering the temperature of the patient to below normothermia, and returning the patient to normothermia.